PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 11 (VIRGINIA AVE.) AND LINCOLN AVE. IN WASHINGTON COUNTY, US 11 (VIRGINIA AVE.) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE TO CROSS THE SOUTH LEG AND A CONCURRENT PEDESTRIAN PHASE TO CROSS THE EAST LEG OF US 11 (VIRGINIA AVE.) AND A PHASE FOR EMERGENCY FIREHOUSE PRE-EMPTION.

CONTROLLER REQUIREMENTS

INSTALL EIGHT-PHASE, FULLY-ACTUATED CONTROLLER WITH VIDEO INTERFACE EQUIPMENT, 2-WIRE CENTRAL CONTROL UNIT AND ALL OTHER NECESSARY EQUIPMENT IN A BASE MOUNTED 'S' TYPE CABINET.

APS NOTES

- TO CROSS VIRGINIA AVE.
 - A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS VIRGINIA AT LINCOLN, WAIT,"
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE
- TO CROSS LINCOLN AVE.
 - A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS LINCOLN AT VIRGINIA, WAIT."
 - B. WHEN WALK PHASE BEGINS THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MS. CORREN JOHNSON OF THE MSHA AT (410) 787-7630 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR MUST PROVIDE MR. SNYDER WITH THE NEAREST ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

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ITEM NO.	QUANTITY	DESCRIPTION						
9104	. 1 EA	CONTROLLER CABINET, SIZE "S" WITH CONTROL, VIDEO, INT. 1-8 CAM						
9109	-1 EA	- Cabinet - Extension - Base, size "s"						
9570	88 SF	SHEET ALUMINUM GROUND MOUNTED SIGN						
		SIGNS TO INCLUDE THE FOLLOWING:						
	4 EA	S1-1 (FYG) - (36" X 36") SIGN WITH W16-7P(R) - (FYG) - (24" X 12") SIGN - GROUND MOUNT						
	4 EA	S1-1 (FYG) - (36" X 36") SIGN WITH W16-7P(L) - (FYG) - (24" X 12") SIGN - GROUND MOUNT						
9571	142 SF	SHEET ALUMINUM MAST ARM /POLE MOUNTED SIGN						
		SIGNS TO INCLÚDE THE FOLLOWING:						
	8 EA	D-3(1) (VAR X 16") DUAL FACE SIGN - MAST ARM MOUNT						
	2 EA	M1-5(6) (24" X 48") SIGN - POLE MOUNT						
	2 EA	M1-5(6) (36" X 72") SIGN - POLE MOUNT						
	4 EA	R10-3(1) (9" X 15") SIGN - POLE MOUNT						

EQUIPMENT LIST "B"

B, EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR, ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION								
1001	2 EA	MAINTENANCE OF TRAFFIC								
2002	9 CY	TEST PIT EXCAVATION								
5002	340 LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERMANENT PAVEMENT MARKINGS								
5003	125 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS								
5004	325 LF	12 INCH WHITE THERMOPLASTIC PAVEMENT MARKING LINES								
5005	55 LF	24 INCH WHITE THERMOPLASTIC PAVEMENT MARKING LINES								
6001	300 LF	STANDARD TYPE A COMINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH								
6002	1150 SF	5 INCH CONCRETE SIDEWALK								
6003	53 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS								
8001	24 EÅ	12 INCH LED SIGNAL HEAD SECTION								
8002	1 EA	2-WIRE CENTRAL CONTROL UNIT								
8007	1 EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH LED LAMP AND LUMINAIRE								
8008	4 EA	AUDIBLE /TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS								
8009	4 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)								
8011	1 EA	CONCRETE TESTING								
8013	1 EA	EMBEDDED METERED SERVICE PEDESTAL WITH BYPASS SWITCH								
8015	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT (ANY SIZE)								
8017	1 EA	INTERSECTION POLICE CONTROL								
86018	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD								
8020	2 EA	MAST ARM POLE & 38' MAST ARM ANY 'T' DIMENSION								
8027	1 EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)								
8029	1 EA	TWIN MAST ARM POLE & 50'/60' MAST ARMS ANY 'T' DIMENSION								
8032	4 EA	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH								
8038	180 LF	ELECTRICAL CABLE - 3 - CONDUCTOR (NO.12 AWG) TYPE T/C								
8042	400 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT- BORED								
8044	175 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT- TRÊNCHED								
8045	68 LF	WOOD SIGN SUPPORTS UP TO 4" X 6"								
8046	230 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)								
8048	600 LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE								
8049	1 EA:	WEATHER HEAD, 3 İNCH								
8051	30 LF	ELECTRICAL CABLE 1 - CONDUCTOR NO. 8 AWG - THHN /THWN								
8052	5 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE								
8056	30 LF	3 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER								
8057	3 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE								
8059	240 ĹF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 14 AWG)								
8060	810 LF	ELECTRICAL CABLE 3 - CONDUCTOR (NO. 14 AWG)								
8061	330 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO.14 AWG)								
80 6 2	500 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO.14 AWG)								

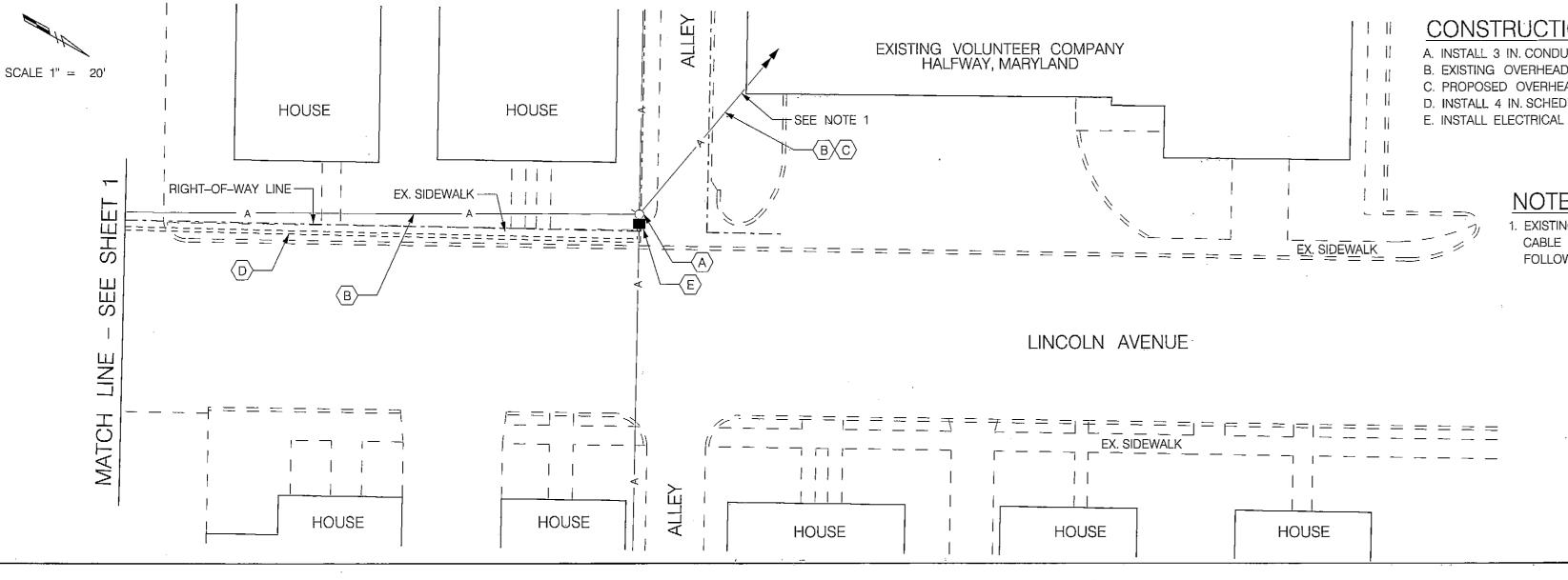
ÉQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY

QUANTITY DESCRIPTION

1 EA POLE MOUNTED CONTROLLER

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



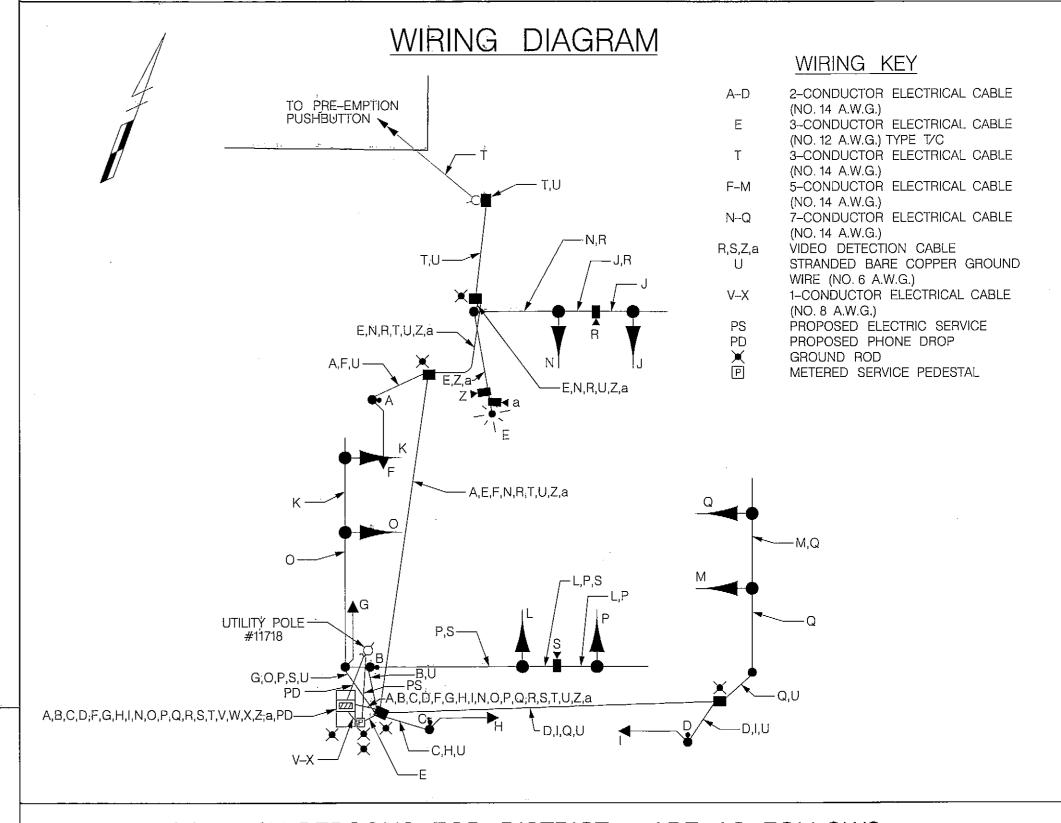
CONSTRUCTION DETAILS

- A. INSTALL 3 IN. CONDUIT RISER AND 3 IN. WEATHER HEAD ON EXISTING UTILITY POLE B. EXISTING OVERHEAD FIREHOUSE PRE-EMPTION CABLE TO BE REMOVED
- C. PROPOSED OVERHEAD FIREHOUSE PRE-EMPTION CABLE
- D. INSTALL 4 IN. SCHEDULE 80, RIGID PVC, ELECTRICAL CONDUIT- BORED E. INSTALL ELECTRICAL HANDHOLE AT BASE OF UTILITY POLE

I. EXISTING WIRE FOR FIREHOUSE SHALL BE REMOVED AND NEW CABLE ROUTED FROM THE UTILITY POLE INTO THE FIREHOUSE FOLLOWING THE SAME ROUTE TO THE PUSHBUTTON

PHASE CHART

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PHASE 2 & 6	G	G	G	G	R	R	R	R	DW	DW	WK	WK	
PED CLEAR	G	G	G	G	R	R	R	R	DW	DW	FL-DW	FL-DW	
2 & 6 CHANGE	Υ	Υ	Υ	Υ	R	R	R	R	DW	DW	DW	DW	•~ ~ •
PHASE 4 & 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW	
4 & 8 CHANGE	R	R	R	R	Υ	Υ	Υ	Υ	DW	DW	DW	DW	- - -
4 & 8 ALT.	R	R	R	R	G	G	G	G	WK	WK	DW	DW	9 1
PED CLEAR	R	R	R	R	G	G	G	G	FL-DW	FL-DW	DW	DW	
4 & 8 CHANGE	R.	R	R	R	Υ	Υ	Υ	Υ	DW	DW	DW	DW	[¹ 4]
PRE-EMPTION	R	· R	R	R	G	G	R	R	DW	DW	DW	DW	
CHANGE	. R	R	R	R	Y	Y	R	R	DW	DW	DW	DW]- J
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	DARK	DARK	DARK	DARK	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \



CONTACT PERSONS FOR DISTRICT 6 ARE AS FOLLOWS:

MR. KC KEITH ACTING ASSISTANT DISTRICT ENGINEER - TRAFFIC (310) 729-8444

MR. DWAYNE BITTNER ASSISTANT DISTRICT ENGINEER - MAINTENANCE (301) 729-8457

MR, DAVID R. FELKER UTILITY ENGINEER (301) 729-8439

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MS. CORREN JOHNSON CHIEF, TRAFFIC OPERATIONS

MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS (410) 787-7630 (410) 787-7676

MR. MIKE STOCKER SUPPLY OFFICE SIGNAL SHOP WAREHOUSE (410) 787-7668

MR. ED RODENHIZER CHIEF, SIGNAL OPERATIONS SECTION (410) 787-7652

TOD NO: XX524-07 SHA NO: WA250B52 US 11 @ Lincoln Avenue

TRAFFIC CONCEPTS, INC.

325 Gambrills Road

Suite B

Gambrills, MD 21054

(410) 923-7101

FAX: (410) 923-6473

EMAIL: KSCHMID@TRAFFIC-CONCEPTS.COM

DRAWING NO. TS-642 B GI

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

US 11 (VIRGINIA AVE.) AND LINCOLN AVE.

HALFWAY, MARYLAND

GENERAL INFORMATION PLAN

SCALE_AS_SHOWN DATE 8-20-2013 CONTRACT NO. XX5245185 DESIGNED BY J.K. SCHMID WASHINGTON 21001103.98 DRAWN BY J.K. SCHMID LOGMILE CHECKED BY T.ZAYDEL TIMS NO. F.A.P. NO. TOD NO. PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 42413, EXPIRATION DATE: 6/6/2014.

SHEET NO. 2 OF 3

PLOTTED: Tuesday, August 20, 2013 AT 11:11 AM FILE: Z:\2400\2477 RK&K\Task 188\Signal\signal.dgn